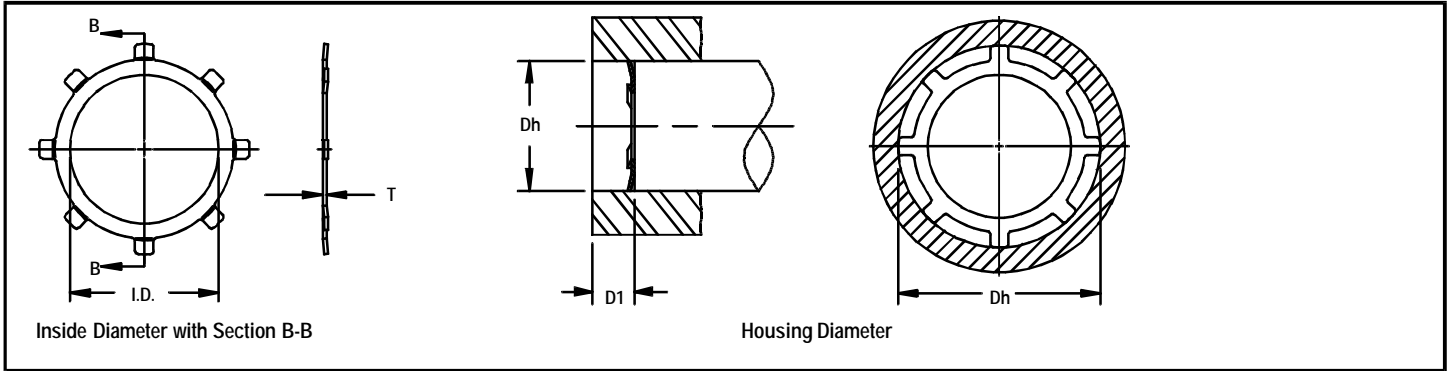


Prongs dig into the housing when load is introduced to other side.



RING NO.	HOUSING DIAMETER Inches				RING SIZE & WEIGHT				No. of Prongs	Thrust Load lbs.	Weight Per 1000 Pcs. lbs.	Min. Distance Face of part to end of housing D1
	Dh DEC		Dh FRACT	Dh mm	INSIDE DIAMETER		THICKNESS***					
	FROM	TO			I.D.	Tol.	T	Tol.				
TI-31	.311	.313	5/16	7.92	.136	±.005	.010	±.001	6	81	.11	.040
TI-37	.374	.376	3/8	9.53	.175				6	76	.16	.040
TI-43	.437	.439	7/16	11.13	.237				6	71	.20	.040
TI-44	.440	.442	-	11.20	.258				6	41	.18	.040
TI-50	.498	.502	1/2	12.7	.258				6	61	.24	.040
TI-56	.560	.564	9/16	14.27	.312				6	51	.29	.040
TI-62	.623	.627	5/8	15.85	.390				6	46	.30	.040
TI-63	.638	.640	-	16.23	.390				6	43	.32	.040
TI-75	.748	.752	3/4	19.05	.500				8	76	.62	.060
TI-87	.873	.877	7/8	22.23	.625				8	71	.75	.060
TI-93	.936	.940	15/16	23.83	.687	10	71	.85	.060			
TI-100	.998	1.002	1	25.4	.750	10	75	.91	.060			
TI-112	1.123	1.127	1 1/8	28.58	.813	±.010	.015	±.002	10	60	1.30	.060
TI-125	1.248	1.252	1 1/4	31.75	.938				10	60	1.50	.060
TI-143	1.436	1.44	1 7/16	36.51	1.117				12	60	1.73	.060
TI-150	1.498	1.502	1 1/2	38.10	1.188				12	60	1.80	.060
TI-175	1.748	1.752	1 3/4	44.45	1.438				12	55	2.10	.060
TI-200	1.998	2.002	2	50.80	1.600				14	55	3.00	.060

\*\*\* FOR PLATED RINGS ADD .002" TO MAXIMUM THICKNESS.

LARGER SIZES MAY BE AVAILABLE UPON REQUEST.

† BASED ON HOUSINGS/SHAFTS MADE OF COLD ROLLED STEEL. FOR AN EXPLANATION OF FORMULAS USED TO DERIVE THRUST LOAD AND OTHER PERFORMANCE DATA, CONTACT THE ROTOR CLIP ENGINEERING DEPT.

TABLE 1: HARDNESS RANGES-ROTOR CLIP STAINLESS STEEL RINGS (PH 15-7 MO)

RING	SIZE RANGE	SCALE	ROCKWELL HARDNESS
TI	31-62	15N	82.5-86*
	75&over	15N	82.5-86

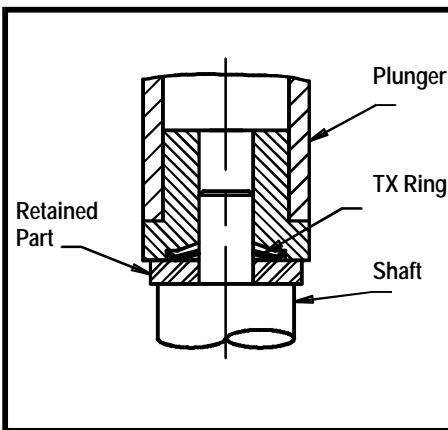
TABLE 2: HARDNESS RANGES-ROTOR CLIP BERYLLIUM COPPER RINGS

RING	SIZE RANGE	SCALE	ROCKWELL HARDNESS
TI	31-62	15N	77-82*
	75&over	15N	77-82

TABLE 3: HARDNESS RANGES-ROTOR CLIP CARBON STEEL RINGS (SAE 1060-1090)

RING	SIZE RANGE	SCALE	ROCKWELL HARDNESS
TI	31-62	15N	84-86*
	75&over	15N	84-86

\*Hardness cannot be checked with any degree of accuracy directly on these rings.



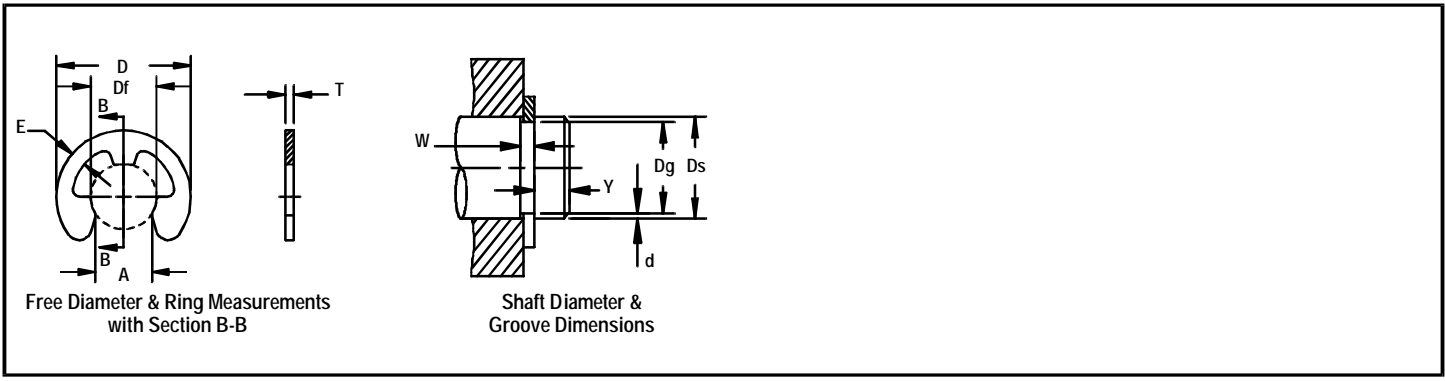
## PLUNGER For Fast, Easy Installation of Rotor Clip TX, TY Rings.

A cylindrical plunger can be easily made to install TX, TY rings. The ring is positioned at the opening of the plunger and then pushed or tapped onto the shaft, as illustrated.



# Rotor Clip JE Retaining Rings Radially Assembled, External Retaining Rings

The three prongs of this ring make contact with the bottom of the groove for effective retention of an assembly.



JIS E RETAINING RINGS (Japanese Standard B2805)

RING NO.	SHAFT		GROOVE SIZE				RING SIZE										
	Ds (mm)		DIAMETER		WIDTH		EDGE MARGIN	FREE DIAMETER		THICKNESS		GAP		BEAM WIDTH		Free Outside Dia.	
	From	To	Dg	Tol.	W	Tol.	Y Min.	Df	Tol.	T	Tol.	A	Tol.	E	G	Tol.	
JE-0,8	1	1,4	0,8	+0,05	0,3	+0,05	0,4	0,8	-0,08	0,2	±0,02	0,7	-0,25	0,3	2	±0,1	
JE-1,2	1,4	2,0	1,2	+0,06	0,4		0,6	1,2	-0,09	0,3	±0,025	1		-0,30	0,4		3
JE-1,5	2,0	2,5	1,5		0,5		0,8	1,5		0,4	1,3	0,6			4		
JE-2	2,5	3,2	2,0	+0,075	0,5	+0,10	1,0	2	-0,12	0,4	±0,03	1,7	-0,35	0,7	5	±0,2	
JE-2,5	3,2	4,0	2,5		0,5		1,0	2,5		0,4	2,1	0,8		6			
JE-3	4,0	5,0	3,0	+0,09	0,7	+0,14	1,0	3	-0,15	0,6	±0,04	2,6	-0,50	0,9	7	±0,3	
JE-4	5,0	7,0	4,0		0,7		1,2	4		0,6		3,5		1,1	9		
JE-5	6,0	8,0	5,0	+0,11	0,7	+0,14	1,2	5	-0,18	0,6	±0,05	4,3	-0,50	1,2	11	±0,3	
JE-6	7,0	9,0	6,0		0,9		1,2	6		0,8		5,2		1,4	12		
JE-7	8,0	11,0	7,0	+0,13	0,9	+0,14	1,5	7	-0,21	0,8	±0,06	6,1	-0,50	1,6	14	±0,3	
JE-8	9,0	12,0	8,0		0,9		1,8	8		0,8		6,9		1,8	16		
JE-9	10,0	14,0	9,0	+0,13	0,9	+0,14	2,0	9	-0,21	0,8	±0,07	7,8	-0,50	2,0	18	±0,3	
JE-10	11,0	15,0	10,0		1,15		2,0	10		1,0		8,7		2,2	20		
JE-12	13,0	18,0	12,0	+0,11	1,15	+0,14	2,5	12	-0,18	1,0		10,4		2,4	23		
JE-15	16,0	24,0	15,0	+0,13	1,65	+0,14	3,0	15	-0,21	1,5	±0,06	13,0	-0,45	2,8	29	±0,3	
JE-19	20,0	31,0	19,0		1,65		3,5	19		1,5	16,5	4,0	37				
JE-24	25,0	38,0	24,0	+0,13	2,2	+0,14	4,0	24	-0,21	2,0	±0,07	20,8	-0,50	5,0	44	±0,3	

TABLE 1: HARDNESS RANGES-ROTOR CLIP  
STAINLESS STEEL RINGS (PH 15-7 MO)

RING	SIZE RANGE	SCALE	ROCKWELL HARDNESS
JE	0,8-2,5	15N	82,5-86
	3-9	30N	63-69,5
	10-24	C	44-51

TABLE 2: HARDNESS RANGES-ROTOR CLIP  
BERYLLIUM COPPER RINGS

RING	SIZE RANGE	SCALE	ROCKWELL HARDNESS
JE	0,8-2,5	15N	79-82*
	3-9	30N	56,5-62
	10-24	C	37-43

TABLE 3: HARDNESS RANGES-ROTOR CLIP  
CARBON STEEL RINGS (SAE 1060-1090)

RING	SIZE RANGE	SCALE	ROCKWELL HARDNESS
JE	0,8-2,5	15N	82,5-87
	3-9	30N	63-71
	10-24	C	44-53